

Восстановление по теории Лисовых, 423

Dr. William W. Mullins, *Crystallization of Metals: Characteristics of the Plastic Deformation on the Theory of Dislocation Processes*, McGraw-Hill Book Co., 1960. \$5.50. 350 pp. 1000 copies printed.

Dr. B. I. B. Gulyayev, Doctor of Technical Sciences, Professor of Publishing House: V. B. Belenitskiy Tech. Sci. S. O. Zhukovskiy.

**REMARKS:** This book is intended for metallurgists and scientific workers. It may also be useful to technical personnel at plants.

CONTENTS: The book contains the *Annals of the Physics Conference (1960) on the Theory of Crystalline Processes*. The previous 3 conferences dealt with hydrodynamics of molten metals (1957), solidification of metals (1959), and crystallization of polymers (1959). General problems in the crystallization of metals, including the crystallization of noncrystalline metals, alloy steels with special properties, cast irons, and nonferrous alloys, are discussed. Recommendations to given by B. G. Korovay and E. Z. Ostrovskiy, A. B. Chugayev and A. G. Smolyar for their contributions as to understanding of the main problems involved in the theory of crystallization of ferrous and nonferrous metals and alloys. Acknowledgments A. V. Smolyar to those involved in connection with his work on the planning of research on special problems. Without secondary removal of the articles.

### III. CRYSTALLIZATION OF METAL-POLYMER BLENDS AND ALLOYS

**RESEARCH AND ANALYSIS**

### Abstract

256

1. L. E. and A. A. Zernitsin. Effect of Ultrasonic Vibrations on the Melting Crystallized in a Heating Field.

276

#### IV. CORRELATION OF CASE INDEX

Banks, R. F., and Th. S. Fernald. Esthetic Crystallization of Gray Iron

1

Allegedly, Dr. J. Dineen's relation of Wilson in Court  
Lynn and Sweet's

5

Suber, A. A. Silicon ligands in zero-valent-silicon alloys as the structure of cast iron

1

Fig. 1. Temperature of the Cooling Rate During Crystallization on the Distribution of Alloying Elements between Phase in White Cast Irons

22

WILSON, B. S. Investigation of the Spheroidal Graphite Formation Process in Cast Irons (in the Cast State)

257

Preparation, A. L. and J. V. Petrova.  
Chem. Zvezda (1961) no 125 24. Crystallization of magnesium

३५

ME-209, L. 7. On the Modification of Malicious Chat From West  
Smith and Porter

22

- CONSULTATION OF INTERESTED AGENCIES

Krato, J. E., Jr., To. A. Lehtinen, and E. M. Goulet. Crystallization of Nitro in an Ultrasonic Field

208

Sparsity, A. O. Factors Influencing the Structure of a Carling

23

# Alley Carriages Under Protest

613

Chytrallanin in the Change in Superstructure of Al<sub>2</sub> and Al<sub>3</sub> Microalloys. M. V. I. S. Bortone and A. J. A. A. A. A.

962

obtained by the electrolysis of Copper Alloy solutions in a solution of Copper Electro-

... ..

3

### Abstracts, B. A. Characteristic Features of Microscopic Chemical Heterogeneity in Alloys

2

# MEMORANDUM OF THE CONFERENCE ON THE PROBLEM OF THE CRYSTALLIZATION OF POLYMER

1

S/137/61/000/011/089/123  
A060/A101

AUTHORS: Taran, Yu. N., Progrebnoy, E. N., Yasskiy, D. I.

TITLE: On the crystallization mechanism of cast iron in revolving crystallizer rolls

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 3-4, abstract 11114 (V sb. "Polucheniye izdeliy iz zhidk. met. s uskoren. kristallizatsiyey". Moscow-Kiyev, Mashgiz, 1961, 197-210)

TEXT: The authors cite the results of an investigation devoted to the study of the influence of the forming parameters upon the structure and the characteristics of cast iron sheet. The structural base of the cast iron sheet is formed by a ramified lattice of austenite dendrites, ledeburite inclusions are comparatively rarely encountered also in the middle of the sheet. As one recedes from the central zone, the size of the dendrites increases and at the edge portions of the sheet it is possible to observe the formation of large giant crystals with perfect dendrite form. The nucleation and growth of such crystals occurs in a wedge of molten metal without connection with crystallization of the surface films. The completion of their growth occurs in those

Card 1/2

On the crystallization mechanism ...

S/137/61/000/011/089/123  
A060/A101

portions of the melt which, in flowing over the roller surface, maintain the contact with that surface for a long time. In the process of growing, the large, little ramified dendrites of austenite deplete the surrounding liquid solution of Fe and in the interdendritic spaces ledeburite inclusions with fine structure are formed. Under high forming pressures, there is formed a nonuniform (over the sheet length) three-layered structure, which has a deleterious effect upon the characteristics of the sheet. It was established that the optimal interval of the roll pressure magnitude is from 60 to 130 kg/running cm of the sheet width. Forming of the sheet in this interval guarantees the sufficiently homogeneous structure and satisfactory mechanical characteristics of the sheet.

A. Savel'yeva

[Abstracter's note: Complete translation]

J  
—

Card 2/2

CHERNOVOL, A.V. [Chornovol, A.V.]; TARAN, Yu.N. [Taran, IU.M.];  
PANCHINA, T.A. [Panchyna, T.O.]

Effect of calcium on the form of graphite inclusions in Fe-C-Si  
alloys. Dop.AN URSR no.7:911-914 '61. (MIRA 14:3)

1. Institut liteynogo proizvodstva AN USSR i Dnepropetrovskiy  
metallurgicheskiy institut. Predstavleno akademikom AN USSR  
V.N.Svechnikovym [Sviechnykov, V.M.].  
(Iron-carbon-silicon alloys) (Calcium)

KRIVOSHEYEV, A. Ye.; TARAN, Yu. N.

Characteristics of the structure of high-strength two-layer  
rolls of chromium-nickel cast iron. Izv. vys. ucheb. zav.;  
chern. met. 5 no.12:131-137 '62.

(MIRA 16:1)

1. Dnepropetrovskiy metallurgicheskiy institut.

(Rolls(Iron mills)

(Iron-nickel-chromium alloys—Metallography)

CHERNOVOL, A.V.; TARAN, Yu.N.

Inoculation of cast iron by zinc. Lit.proizv. no.4:19-20 Ap '63.

(Cast iron—Metallurgy)

(Zinc)

(MIR 16:4)

"ARAN, Yu.N.; CHERNOVOL, A.V.

Effect of the rate of cast iron cooling on the efficiency of  
inoculants. Izv. vys. ucheb. zav.; chern. met. 6 no.9:181-  
184 '63. (MIRA 16:11)

1. Dnepropetrovskiy metallurgicheskiy institut.

CHEKMAREV, A.P., akademik; GRUDEV, A.P., kand. tekhn.nauk; TARAN, Yu.N., kand. tekhn.nauk; ZIL'BERG, Yu.V., inzh.; KURILENKO, V.Kh., inzh.; DERGACHE, A.Ya., inzh.; LITINSKIY, D.M., inzh.; IESTEROVA, G.V., inzh. SAMOYLENKO, V.D., inzh.

Reducing metal sticking on the rolls during the hot rolling of stainless tubes. Stal' 23 no.7:631-635 JI '63. (MIRA 16:9)

1. AN UkrSSR (for Chekmarev).  
(Pipe mills) (Steel, Stainless)



TARAN, Yu.N. [Taran, IU.M.]; CHERNOVOL, A.V. [Chornovol, A.V.]

Formation of spherulitic graphite. Dop. AN URSR no.11:1486-  
1489 '64. (MIRA 18:1)

1. Dnepropetrovskiy metallurgicheskiy institut i Institut  
problem lit'ya AN UkrSSR.

KRIVOSHEYEV, A.Ye.; TARAN, Yu.N.

Characteristics of the microstructure of rolls made of nickel-  
manganese cast iron. Izv. vys. ucheb. zav.; chern. met. 7  
no.2:147-152 '64. (MIRA 17:3)

1. Dnepropetrovskiy metallurgicheskiy institut.

BONINA, Yu.Y.; TARAN, Yu.N.

Use of polarized light during the microanalysis of alloyed cast  
iron. Izv. lab. 30 no.4:463 '64. (MIRA 17:4)

1. Dnepropetrovskiy metallurgicheskiy institut.

TARAN, Yu.N. (Dnepropetrovsk); LEV, I.Ye. (Dnepropetrovsk); YATSENKO, A.I.  
(Dnepropetrovsk); BELAY, G.Ye. (Dnepropetrovsk); Prinimali uchastie;  
GERASIMCVA, T.I., Inzh.; KURASOV, A.N.

Specific features of the eutectic crystallization of cast iron in-  
noculated with cerium. Izv. AN SSSR. Met. no.3:131-139 My-Je '65.  
(MIRA 18:7)

KRIVOSHEYN, A.Ye., doktor tekhn.nauk; TARAN, Yu.N., kand.tekhn.nauk; LUTINA,  
Yu.K., inzh.

Investigating the isothermal decomposition of austenite in white  
chromium-nickel cast iron. Lit. proizv. no.7:22-24 JI '65.

(MIRA 18:8)

BUNINA, Yu.K.; TARAN, Yu.N.

Kinetics of the isothermal transformations of austenite in white  
chromium-nickel cast iron. Izv.vys.ucheb.zav.; Chern.Met. 8 no.6:  
151-155 '65. (MIRA 18:8)

1. Dnepropetrovskiy metallurgicheskiy institut.

KRIVONOSYEV, A.Ye.; TARAN, Yu.N.; KALININA, L.T.; NIKOLAYEV, N.A.

Effect of anomalous structure on the properties of chilled magnesium  
cast iron. Izv. vys. ucheb. zav.; chern. met. 8 no.7:169-174 '65.  
(MIRA 18:7)

1. Dneprovskiy metallurgicheskiy institut.

BUNIN, K.P.; LEV, I.Ye., kand. tekhn. nauk; SNAGOVSKIY, V.M., inzh.; TARAN,  
Yu.N., kand. tekhn. nauk

Structure of white chromium cast iron. Lit. proizv. no.9:23-24  
S '65. (MIRA 18:10)

1. Chlen-korrespondent AN UkrSSR (for Bunin).



TARAN, Yu.N.; NOVIK, V.I.

Exposure of the granular structure of cementite in white cast iron.  
Zav. lab. 31 no.9:1110-1111 '65. (MIRA 18:10)

1. Institut chernoy metallurgii imeni Bardina.

TARAN, Yu.N.; SNAGOVSKIY, V.M.; LEV, I.Ye.

Microscopic division of the carbide phases in Fe - C - Cr alloys.  
Zav. lab. 31 no.9:1111-1112 '65. (MIRA 18:10)

1. Institut chernoy metallurgii imeni Bardina.

LEV, I.Ye.; BELEY, G.Ye.; TARAN, Yu.N.; YANUSHKO, A.I.

Investigating the distribution of cerium in cast iron with the help  
of an electron probe. Fiz. met. i metalloved. 20 no.2:236-242 Ag  
'65. (MIRA 18:9)

1. Dnepropetrovskiy metallurgicheskiy institut i Nauchno-issledovatel'-  
skiy institut chernoy metallurgii, Dnepropetrovsk.



LUSHCHIKOV, V.I.; MANENKOV, A.A.; TARAN, Yu.V.

[Dynamic polarization of protons in hydrogen peroxides and  
tertiary butyl] Dinamicheskaya polarizatsiya protonov v pe-  
rekisakh vodoroda i tretichnogo butila. Dubna, Ob"edinennyi  
in-t iadernykh issl., 1961. 7 p. (MIRA 15:1)  
(Protons) (Hydrogen peroxide) (Butoxy group)

1965 / 51 / 003 / 011 / 037 / 056  
 200/B138

AUTHORS: Lushchikov, V. I., Manenkov, A. A. and Taran, Yu. V.

TITLE: Dynamic polarization of protons in irradiated polyethylene

PERIODICAL: Fizika tverdogo tela, v. 3, no. 1, 1961, 3503-3508

TEXT: The authors investigated possibilities of producing targets with aligned protons. Some experiments with polyethylene are described with reference to work carried out by G. Hwang and T. M. Sanders (Ref. 3, see below). Fig. 1 shows the experimental arrangement by means of which simultaneous observations can be made of nuclear magnetic resonance and electron paramagnetic resonance at helium temperatures. 1.9300-Mcps vibrations ( $H_{102}$ -mode) were excited in the cavity. The amplitude of the primary oscillations were kept at a low ( $\sim 0.005$  v) and constant level by means of an automatic level trimmer. Various types of polyethylene were studied: (1) ПЭВН1 (PEVP1) - viscosity 3.2 poise, (2) ПЭВН2 (PEVP2) - viscosity 2.6 poise, (3) ПЭНН (PENP) - low viscosity. The specimens were bombarded by fast neutrons for 20 hours at 65°C. The rise in proton polarization was determined in terms of the dynamic amplification factor  $\eta$ .

Card 1/43

Dynamic polarization of protons...

3/18/61/003/011/037/056  
B108/B138

which is the ratio of the nuclear magnetic resonance signal in the case of saturation of the electron resonance of the F-centers to the signal without saturation of the F-centers. This factor increased with the molecular weight of the polymer chains. Between 1.6 and 17°K,  $\eta$  was practically independent of temperature. Nuclear spinlattice relaxation time was determined from the drop in the nuclear magnetic resonance signal. Both build-up and decay of nuclear magnetic resonance are characterized by two time components, a long one and a short one, which is some 30 % of the long component. This is explained by the existence of two kinds of protons. Protons near the F-centers have a short relaxation time, protons far from the paramagnetic centers have a long relaxation time. The polarization of the second kind is due to spin diffusion. F. L. Shapiro, V. A. Milyayev, P. A. Krupchitskiy, and B. I. Kikorev are thanked for their interest and assistance. There are 5 figures, 1 table, and 5 non-Soviet references. The two most recent references to English-language publications read as follows: G. Hwang, T. M. Sanders. Proceedings of the 7-th International Conference on Low Temperature Physics, University of Toronto, p. 98, 1960; O. S. Leifson, C. D. Deffeyes. Bull. Am. Phys. Soc., 6, no. 3, 1961.

Card 2/4 3

Dynamic polarization of protons...

3/161/61/003/011/037/056  
B108/B138

ASSOCIATION: Fizicheskii institut im. P. N. Lebedeva AN SSSR Moskva  
(Institute of Physics imeni P. N. Lebedev AS USSR Moscow)

SUBMITTED: June 26, 1961

Legend to Fig. 1: Г1 - 900-kcps-generator, Г2 - nuclear magnetic resonance generator, Г3 - ЗГ-12 (ZG-12) audio-frequency oscillator, Y1 - hf-amplifier, Y2 - lf-amplifier, Y3 - 860-ops resonance amplifier, Y4 - automatic frequency control amplifier, Д - detector, Сд - synchronous detector, Кд - crystal detector, Пк - klystron supply, saturation clystron, Am - attenuator, Чн - matched load, Фн - ferrite rotor, Гк - helium cryostat, Ад - nitrogen Dewar, К - coaxial cable, р. - resonator cavity, М.К. - modulator coils, М.В.О. - water-cooled magnet, О - oscilloscope, Сп. - ЭПМ-09 (EPP-09) recorder.

✓  
1

Card 3/4 3



GUL'KO, A.D.; TARAN, Yu.V.

Production and use of polarized resonance neutrons. Atom.energ. 10  
no.5:506-508 My '61. (MIRA 14:5)

(Neutrons)

14510  
S/161/63/005/001/036/064  
B108/B180

AUTHORS: Lushchikov, V. I., Manenkov, A. A., and Taran, Yu. V.  
TITLE: Dynamic polarization of protons in lanthanum-magnesium binary  
nitrate

PERIODICAL: Fizika tverdogo tela, v. 5, no. 1, 1963, 233 - 236

TEXT: Earlier work on the dynamic polarization of protons (PTT, 3, 3503, 1961) is continued here.  $(\text{La,Ce})_2\text{Mg}_3(\text{NO}_3)_{12} \cdot 24\text{H}_2\text{O}$  single crystals were grown from a saturated  $\text{La}_2\text{Mg}_3(\text{NO}_3)_{12}$  solution with an appropriate addition of  $\text{Ce}_2\text{Mg}_3(\text{NO}_3)_{12}$ . The sample was placed in a resonator so that the hexagonal crystal axis was always perpendicular to  $\text{H}_0$ , the external magnetic field. In this position,  $g_1 = 1.83$  for the  $\text{Ce}^{3+}$  ion. The increase in the polarization of the protons in the crystal on saturation of the epr was determined from the increased amplitude of the nar signal from the proton. With fixed epr frequency typical polarization peaks were observed at  $\text{H}_0 \pm \frac{\Delta\text{H}}{2}$ , which corresponds to the forbidden transition at the frequency

Card 1/2

Dynamic polarization of...

S/181/63/005/001/036/664  
B108/B180

$\nu_{\text{exc}} \mp \nu_{\text{nucl}}$ . The greatest increase in polarization was found at 1.6°K in a field of 3700 oe for a crystal with 0.5% Ce. In this case, the proton polarization was 170 times greater than in thermal equilibrium. This decreases somewhat when the temperature falls to 1.5°K. Measurements of the coefficient of dynamical increase in polarization in dependence on the power of epr saturation showed good agreement with the simple phenomenological theory of spin diffusion (O. S. Leifson, C. D. Jeffries. Bull. Am. Phys. Soc., 6, no. 3, 1960; Phys. Rev., 122, 1781, 1961). The same applies to the nuclear spin-lattice relaxation time in dependence on the  $\text{Ce}^{3+}$  concentration in the range 0.2 - 1% (at constant temperatures between 1.5 and 1.7°K). Between 1.5 and 1.7°K, the relaxation time is proportional  $T^{-4.1}$  at any  $\text{Ce}^{3+}$  concentration. There are 3 figures and 1 table.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR, Moskva  
(Physics Institute imeni P. N. Lebedev AS USSR, Moscow)

SUBMITTED: August 6, 1962

Card 2/2

S/181/63/005/002/009/051  
B104/B186

AUTHORS: Kessenikh, A. V., Lushchikov, V. I., Manenkov, A. A., and  
Taran, Yu. V.

TITLE: Proton polarization in irradiated polythene

PERIODICAL: Fizika tverdogo tela, v. 5, no. 2, 1963, 443 - 454

TEXT: The aim is to find materials suitable for polarized proton targets, and to investigate the physical properties of irradiated polythene. To this end the studies of dynamic polarisation in high-density polythene irradiated with fast protons (V. I. Lushchikov, A. A. Manenkov, Yu. V. Taran, FET, 3, 3503, 1961) were continued. The dynamic nuclear polarisation was measured at 77, 4.2 and 1.6°K in a magnetic field of ~3400 oe using a device described in a previous paper. The 17.9-6 mm test pieces were placed in the coil of an autodyne n.m.r pickup, with the axis of the coil perpendicular to the long side of the resonator.  $H_{102}$  oscillations with a frequency of 9440 Mc/s were set up in the resonator. The dynamic polarisation factor of the protons was determined from the amplification factor of the n.m.r. signal at saturated e.p.r. of the free radicals formed when the

Card 1/3

Proton polarization in...

3/181/63/005/002/009/051  
B104/B186

polythene was irradiated. Results: In the He temperature range, the cross-relaxation under conditions of non-uniform e.p.r. line broadening plays an important part in the dynamic polarization of the nuclei. This can be used to explain the increase in the broadening of the dynamic nuclear polarization maxima as the temperature decreases, and the fact that the dynamic polarization factor does not depend on temperature. The time dependence of the n.m.r. lines is described as the sum of two exponents with relaxation times of  $T_1$  and  $T_2$ . The nuclear relaxation depends linearly on  $T_1$  and  $T_2$ ,

this result being contrary to theoretical predictions (O. S. Leifson, C. D. Jeffries, Phys. Rev., 122, 1781, 1961). It is explained on the assumption that the action zone of the paramagnetic centers is equalized at the expense of fast spin diffusion. The dynamic polarization coefficient depends linearly on the molecular weight of the initial material. There are 6 figures. ✓

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Physics Institute imeni P. N. Lebedev AS USSR); Nauchno-issledovatel'skiy fiziko-khimiicheskiy institut im. L. Ya. Karpova, Moskva. (Scientific Physicochemical Research Institute imeni L. Ya. Karpov, Moscow)

Card 2/3

Proton polarisation in...

B/181/63/005/002/009/051  
B104/B186

SUBMITTED: August 6, 1962



Card 3/3

L 17999-63  
RM/ww/MAY

EWI(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Pc-l/Pr-l

ACCESSION NR: AP3001284

S/0181/63/005/006/1640/1642 74

AUTHORS: Kessenikh, A. V.; Lushchikov, V. I.; Manenkov, A. A.; Taran, Yu. V. 68

TITLE: Relaxation and dynamic polarization of protons in polyethylenes (b)

SOURCE: Fizika tverdogo tela, v. 5, no. 6, 1963, 1640-1642

TOPIC TAGS: proton, dynamic polarization, spin diffusion, nuclear magnetic resonance, polyethylene, molecular weight, ultra-high frequency

ABSTRACT: The authors started with data from V. I. Lushchikov, A. A. Manenkov, and Yu. V. Taran (FTT, 3, 3503, 1961) and A. V. Kessenikh, V. I. Lushchikov, A. A. Manenkov, and Yu. V. Taran (FTT, 4, 433, 1963) concerning the dependence of dynamic polarization in polyethylenes on the average molecular weight. They expected the coefficient of dynamic polarization to be about 60 when the molecular weight was  $2.3 \times 10^6$ . To test this view and to refine the results of the cited papers, they made this study on several samples of polyethylene bombarded by fast neutrons. Measurements were made on a setup described in the first of the above papers, at 77, 4.2, and 1.6K. These experiments have shown that within the limits of experimental accuracy the resolution of dynamic polarization at ultra-high-frequency output and restoration of nuclear polarization after removal of nuclear-

Card 1/2

L 17999-63

ACCESSION NR: AP3001284

6  
magnetic-resonance saturation are described by exponents with identical value of the time of nuclear relaxation. This indicates that the theory of spin diffusion (G. R. Khutsishvili (ZhETF, 42, 1311, 1962)) is equally applicable to dynamic polarization. The measured values of dynamic polarization proved to be smaller than expected and the authors ascribe the difficulty of demonstrating dependence of this property on molecular weight to peculiarities in the technology of preparing the samples. "In conclusion the authors thank B. I. Kokorev for his aid in the work and they thank V. L. Karpov, Doctor of Chemical Sciences, for a number of interesting discussions. They also take this opportunity to express their thanks to T. I. Terekhov and Yu. P. Vyatskiy for determining the molecular weight of one sample and N. A. Slovokhotov for studying the infrared spectrum of the same sample." Orig. art. has: 1 table.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moscow (Physical and Chemical Institute)

SUBMITTED: 21Jan63

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: PH, MA

NO REF SOV: 003

OTHER: 001

Card 2/2



TARAN, Yu.V.

Design of a neutron spin rotator. Atom. energ. 15 no.5:413-414 7  
'63. (MIRA 16:12)

L 13849-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3003158

8/0056/63/044/006/2185/2187

53  
57

AUTHOR: Taran, Yu. V.; Shapiro, F. L.

TITLE: Some methods for polarization and analysis of polarization of intermediate energy neutrons 19

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 2185-2187

TOPIC TAGS: medium energy neutrons, polarization, analysis of polarization, compound nucleus spin

ABSTRACT: Some possibilities are discussed for the polarization and analysis of polarization of neutrons with resonant energies and higher, based on the spin dependence of the nuclear interactions. It is shown that a promising method is to use polarized He sup 3 as an analyzer of neutron polarization. The possible use of a polarization analyzer to measure the depolarization on resonance scattering of neutrons in an unpolarized target. The energies at which these methods can be used are discussed. The strong dependence of the depolarization of the neutrons on the spin of the compound nucleus makes it also possible to determine this spin with sufficient accuracy by measuring the polarization of the scattered neutrons. "In conclusion, the authors take

Card 1/2

L 13849-63

ACCESSION NR: AP3003158

2

this opportunity to thank V. N. Yefimov for valuable discussions." Orig. art.  
has: 5 formulas and 1 table.

ASSOCIATION: Ob''yedinenny'y institut yaderny'kh issledovaniy (Joint Institute  
of Nuclear Research)

SUBMITTED: 02Apr63

DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER: 022

Card 2/2

L 16907-63 EPR/EWT(1)/EWP(q)/EWT(m)/BDS/EPF(n)-2 AFFTC/ASD/IJP(C)/SSD  
Pu-4/Ps-4 WW/JD/JG

ACCESSION NR: AP3005305

S/0056/63/045/002/0394/0396

AUTHOR: Neganov, B. S.; Parfenov, L. B.; Lushchikov, V. I.; Taran, Yu. V.

TITLE: Dynamic proton polarization at 0.5°K 19 76

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 394-396

TOPIC TAGS: dynamic proton polarization, proton spin lattice relaxation, electron proton resonance, lanthanum double nitrate, cerium impurity

ABSTRACT: Results are reported of preliminary experiments on dynamic proton polarization (DPP) in crystals of  $\text{La}_2\text{Mg}_3(\text{NO}_3)_{12} \cdot 24\text{H}_2\text{O}$  with paramagnetic cerium concentration of 0.8% (relative to the lanthanum) at approximately 0.5°K; the experiments were intended to increase the polarization and check the dependence of the proton polarization amplification coefficient on the external magnetic field at fixed electron proton resonance (EPR) frequency, the dependence of the amplification coefficient on the microwave power used to saturate the EPR, and the temperature dependence of the proton spin-lattice relaxation time. The maximum positive value of the amplification coefficient was  $129 \pm 10$ , corresponding in a field of 3500 Oe to a proton polarization  $8 \pm 0.5\%$ . It was found that limit of microwave power

Card 1/2

L 16907-63

ACCESSION NR: AP3005305

2

was sufficient to obtain the maximum amplification coefficient (with resonator Q of approximately 1000). The proton spin-lattice relaxation has a time dependence in the form  $T_{1n}^{-1} \sim T^{-1.65 \pm 0.15}$  with  $T_{1n} = 920 \pm 80$  sec at  $T = 0.32 \pm 0.03^\circ\text{K}$ .

It is therefore concluded that at temperatures below  $1^\circ\text{K}$  no reduction occurs in the amplification coefficient when the temperature of the sample is substantially decreased. The use of higher magnetic fields should yield proton polarizations near 100%. "In conclusion, the authors take this opportunity to thank Prof. F. L. Shapiro for his great interest and attention to this work."

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 01 Jun 63

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 003

Card 2/2

L 00757-66 ENT(1)/ENT(m)/T/ENT(t)/ENT(b) IJP(c) JD/JG/GG

ACCESSION NR: AP5014197

UR/0386/65/001/002/0021/0027

AUTHOR: Lushchikov, V. I.; Taran, Yu. V.; Frank, A. I.

TITLE: Dynamic polarization of deuterons in a lanthanum-magnesium nitrate crystal

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 2, 1965, 21-27

TOPIC TAGS: deuteron polarization, single crystal, deuterium, heavy water, lanthanum, magnesium compound, nitrate

ABSTRACT: An attempt was made to polarize deuterium nuclei by the dynamic method. The specimen was a single crystal of binary lanthanum-magnesium nitrate  $\text{La}_2\text{Mg}_3(\text{NO}_3)_{12} \cdot 24(\text{H}_2\text{O} + \text{D}_2\text{O})$  with a 1%  $\text{Nd}^{142}$  impurity. Part of the ordinary water of crystallization in this crystal has been replaced by heavy water. Mass spectroscopic analysis showed a deuterium content in the crystal of 42%. It was found that polarization in excess of 10% is possible in a magnetic field of 20,000 oersted at a temperature of 1°K, which is much greater than the 1.2% polarization attainable in solid deuterium. Orig. art. has: 2 figures, 1 formula.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 03Mar65

ENCL: 00  
NO REF SOV: 002

SUB CODE: NP  
OTHER: 010

L 5331-66 EWT(1)/EWT(m)/ETC/EWG(m)/T/EWP(t)/EWP(b)/EWA(m)-2 IJP(c)  
RDW/JD/GG

ACCESSION NR: AP5021099

UR/0056/65/049/002/0406/0409

AUTHOR: Lushchikov, V. I.; Neganov, B. S.; Parfenov, L. B.; Taran, Yu. V.

TITLE: Dynamic polarization of protons in a rotating lanthanum-magnesium nitrate crystal

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965, 406-409

TOPIC TAGS: <sup>19</sup>proton polarization, <sup>21, 44, 45</sup>lanthanum compound, spin relaxation

ABSTRACT: A new method of polarizing nuclei in anisotropic crystals is proposed, consisting of rotating the crystals in a stationary magnetic field and a weak radio frequency field. The method is based on the theoretical predictions of A. Abragam (Cryogenics v. 3, 42, 1963) and C. D. Jeffries (Cryogenics v. 3, 41, 1963), wherein the spin temperature is rapidly decreased via spin-spin relaxation accompanied by rapid cooling of the system. The authors verified this method with single crystal (La, Ce)<sub>2</sub>Mg<sub>3</sub>(NO<sub>3</sub>)<sub>12</sub>·24H<sub>2</sub>O, and obtained an appreciable increase in polarization. The experiments were made in fields from 2 to 6 kOe at saturation frequencies from 60 to 170 Mc with the crystal rotating uniformly at 30--600 rpm. The experiments were made at 1.3K. Amplification coefficients up to ~70 were obtained. The ampli-

Card 1/2

07011283

L 5331-66

ACCESSION NR: AP5021099

4  
fication coefficient increased with decreasing cerium<sup>27</sup> concentration and with increasing speed. Only positive polarization was obtained. Advantages of the method are much less stringent magnetic-field uniformity and stability tolerances, and the use of radio frequencies in the meter range instead of ultrahigh frequencies. Orig. art. has: 3 figures and 2 formulas.

ASSOCIATION: Ob'yedinnennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research) 44,55

SUBMITTED: 03Mar65

ENCL: 00

SUB CODE: NP, 88

NR REF SOV: 000

OTHER: 004

Card 2/2 *hd*



LEV, Isaak Yefimovich; ~~TARAN-ZHOVNIR~~, Yu.N., otv. red.; LIBERMAN, S.S.,  
ved. red.; ANDREYEV, S.P., tekhn. red.

[Carbide analysis of cast iron] Karbidnyi analiz chuguna.  
Khar'kov, Metallurgizdat. 1962. 180 v. (MIRA 15:7)  
(~~Cast iron~~—Metallography)  
(Phase rule and equilibrium)

ROMANIA/General Biology. Cytology. Plant Cytology. B-2

Abs Jou : Ref Zhur-Biol., No 16, 1958, 71526

Author : Taranavshi, Ion T.; Mitroiu, Natalia;  
Jitaru, Gabriela; Melber, Dorothea

Inst : C. I. Parhon University

Title : Cytological Research of Intergeneric Sexual  
Hybrids, Neo-Aegilotriticum, Neo-Sacelotriti-  
cum and WheatxWheatgrass, As Well As Parental  
Forms.

Orig Pub : An. Univ. "C. I. Parhon". Ser. stiint. natur.,  
1957, No 14, 129-140

Abstract : The hybrids of Neo-Aegilotriticum [Triticum  
vulgare Vill. x T. durum Desf. ( $2n = 36$ ) x  
Aegilops ovata ( $2n = 28$ )] possess  $2n = 42$ .  
During meiosis, abnormalities are observed,  
which are characteristic for hybrids; however,

Card : 1/2

RUMANIA/General Biology. Cytology. Plant Cytology. B-2  
 Abs Jour : Ref Zhur-Biol., No 16, 1956, 71526

pollen mother cells are observed in which  
 meiosis proceeds normally, which reflects  
 restoration of the cytological equilibrium.  
Neo-Secolotriticum is a prolific amphidiploid  
 ( $2n = 56$ ) which developed from cross breeding  
T. vulgare ( $n = 21$ ) with Secale cereale ( $n =$   
 26) and of subsequent doubling of the chromo-  
 some in  $F_1$ . The hybrid T. durum var. melano-  
pus and Hordeiforme x Agropyron repens and  
intermedium ssp. glaucum, which is promising  
 for future selection, possesses in  $F_1$   $2n = 42$ ,  
 and in  $F_3$   $2n = 56$ , which the author explains  
 by the appearance of amphidiploid gametes which  
 join with haploid gametes. Parental forms were  
 also investigated.

Card : 2/2

KAL'MANOVICH, M.A., inzh.; TARANCHEV, V.V., inzh.

Experience in adjusting and operating high-frequency protection  
channels on a 400 kv. power transmission line. Trudy VNIIE  
no.7:226-243 '58. (MIRA 16:12)

TARANCHUK, M.I.

Means of increasing the oil content of sunflower seeds and the gross yield of oil. Masl.-shir.prom. 21 no.3:8-10 '56. (MLBA 9:8)

1. Voroneshskaya ZOSS maslichnykh kul'tur.  
(Sunflowers)

TARANCHUK, M.V., polkovnik, kandidat filosofskikh nauk; LYALIKOV, B.S.,  
polkovnik redaktor; SOLOMONIK, P.L., tekhnicheskiy redaktor

[Factors bearing constantly on the outcome of war] Postoianno  
deistviushchie faktory, reshaiushchie sud'bu voyny. Izd. 2-oe,  
dop. Moskva, Voen. izd-vo Ministerstva obor. SSSR, 1954. 133 p.  
[Microfilm] (MIRA 10:4)

(Military art and science)

TARANCHUK, N., elektromekhanik

Electric cranes on ships of the "Ugleural'sk" type. Mor.flot  
21 no.1:30-33 Ja '61. (MIRA 14:6)

1. Teplokhod "Urgench."  
(Electric cranes) (Ships--Equipment and supplies)

15. APPARATUS FOR THE DETERMINATION OF THE EXPLOSION LIMITS OF  
GASES OF COMBUSTIBLE MIXTURES



USSR/Soil Science. Mineral Fertilizers.

J-3

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24743.

Author : Terandi, K.

Inst :

Title : The Phosphorus Fertilizers Requirement of the Soils  
of Norther Estonia.

Orig Pub: Sotsialistlik põllumajandus, 1957, No 4, 147-149.

Abstract: No abstract.

Card : 1/1

TARANDI, K. T.

TARANDI, K. T.: "On the content of easily soluble compounds of phosphorus and potassium in the arable layer of field soils of the Estonian SSR." Estonian Agricultural Academy. Tartu, 1956.  
(Dissertation for the Degree of Candidate in Agricultural Sciences)

Source: Knizhnaya letopis'

No. 28

1956

Moscow

KITSE, E., kand. sel'khoz. nauk; PIHO, A., kand. sel'khoz. nauk;  
ROOMA, I., TARANDI, K., dots., sel'khoz. nauk; REINTAM, L.,  
kand. sel'khoz. nauk; ARAK, A., red.

[Soil science] Mullatadus. [By] E. Kitse ja teised. Tallinn,  
Eesti Riiklik Kirjastus, 1962. 406 p. [In Estonian]  
(MIRA 17:10)

(18.5200); 2208; 2308; 2508

83551  
S/135/60/000/009/010/015  
A006/A002

AUTHORS: Kipnis, I. S., Shklovskiy, S. M., Tarandushko, Ye. A., Engineers  
TITLE: Semi-Automatic and Automatic Plasma Cutting of Aluminum Alloys<sup>1</sup> and Stainless Steel

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 9, pp. 31-32

TEXT: Air-arc cutting or drilling-out of parts at a Soviet plant were replaced by mechanized cutting using the IMET-105 (IMET-105) plasma torch, designed by the Institut metallurgii imeni A. A. Baykova AN SSSR (Institute of Metallurgy imeni A. A. Baykov, AS USSR). Optimum cutting conditions were set up using a specially modified semi-automatic gas-cutting machine (Fig. 1). As the IMET-105 torch heated up very rapidly during the tests its design was modified as follows: the tungsten electrode holder rod was made of copper to ensure a better elimination of the heat; the contact surface of the welding cable connection with the tungsten electrode rod was enlarged; the welding cables of 50 mm<sup>2</sup> cross section were replaced by cables of 70 mm<sup>2</sup>. After the aforementioned improvements had been brought about, the torch operation was stable without excessive heating of the current conducting parts. Optimum cutting speeds

Card 1/2

83551

S/135/60/000/009/010/015

A006/A002

Semi-Automatic and Automatic Plasma Cutting of Aluminum Alloys and Stainless Steel

obtained as a result of the tests are given in Table 1 and the quality of cuts produced at these speeds is shown in Table 2. Simultaneously, the authors investigated the effect of the plasma jet heat on the structure of the metal to be cut. It was established that plasma cutting caused only slight changes in the structure of the metal in the zone of cutting and did not affect the strength of the weld. As the semi-automatic machine cannot be used for cutting parts of complicated configurations, as gas cutting machine of the coordinate type was modified (Fig. 3). The cutting of parts was performed using master form plates. The modified machine was brought into use. The introduction of plasma cutting at the plant reduced labor consuming operations and metal consumption although the economical effect was diminished by the use of expensive argon. It is recommended to design a plasma torch operating on a cheaper gas, as e. g. nitrogen. There are 2 tables and 3 figures. X

Card 2/2

1. TARANENKO, A. D.
2. USSR (600)
4. Lumber
7. Calculating changes in linear dimensions and lumber volume due to moisture.  
Der. i lesokhim. prom.. 1 no. 7 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

1. Taranenko, A.D.

2. USSR (600)

4. Hygrometry

7. Simplified psychrometer for distant measurements. Les. prom. 12 no.12, 1952.

9. Monthly List of Russian Accessions. Library of Congress, March 1953, Unclassified.

TARANENKO, A.D., kandidat tekhnicheskikh nauk.

~~no.7:12-14~~ The mechanics of swelling and shrinkage in wood. Der.prom.5  
no.7:12-14 J1 '56. (MIRA 9:9)

1.Giprolesprom.  
(Lumber--Drying)



TARANENKO, A.

What is the cause of the shrinking and swelling of wood and how does it occur?

p. 22 (FATPAR) Vol. 7, No. 1, Apr., 1957

SO: Monthly Index of East European Accessions (AEEI) Vol. 6, No. 11 November 1957

KRECHETOV, Ivan Vasil'yevich; TARANENKO, A.D., red.; SEDOVA, Z.D.,  
red. izd-va; VDOVINA, V.M., tekhn. red.

[Use of flue gases for wood drying] Sushka drevesiny topoch-  
nymi gazami. Moskva, Goslesbumizdat, 1961. 269 p.  
(MIRA 15:3)

(Lumber—Drying)

TARANENKO, A.D., kand.tekhn.nauk

Autoclave-type drying chamber for lumber. Der. prom. 10  
no.7:4-6 J1 '61. (MIRA 14:7)

1. Giprolesprom.  
(Lumber—Drying)

TARANENKO, A.D., kand.tekhn.nauk

High-capacity lumber dryer. Der. prom. 11 no.9:19-20 3 '62.  
(MIRA 17:2)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy derevo-  
obrabatyvayushchey promyshlennosti.

TARANENKO, A.B.

Calculation of nonlinear transitions in a single-band transmitter  
in multichannel telegraph operation with frequency multiplex and  
frequency modulation. Elektrosвяз' 18 no.9:33-39 S '64.  
(MIRA 17 12)

TARANENKO, A.D.

Portable frequency dividers used for checking audio-frequency  
oscillators. Iss. tekhn. no. 4:91-93 J1-Lg '57. (MLBA 10:3)  
(Frequency measurements) (Electronic instruments)

SOV/115-59-9-23/37

9(2), 28(2)  
AUTHOR:

Taranenko, A.D.

TITLE:

A Portable Device for Checking Tube Voltmeters

PERIODICAL:

Izmeritel'naya tekhnika, 1959, Nr 9, p 43 (USSR)

ABSTRACT:

At the Kuybyshevskaya gosudarstvennaya kontrol'naya laboratoriya (Kuybyshev State Control Laboratory), a compact device was developed for testing tube voltmeters on power frequency. This device consists basically of a commutator and four nonreactive, bifilar resistors of 9,000, 900, 90 and 10 ohms which form a voltage divider with the factors 10, 100 and 1,000. The device is to be used with reference voltmeters ASTV and AMV, whereby an additional 1 kilohm resistor is used for the latter. The resistors have been certified for an accuracy of  $\pm 0.02\%$ . Auxiliary tables of the permissible errors of tube voltmeters VKS-7, VLU-2, LV-9, MVL-1, MVL-2 with the voltage division factors 10, 100 and 1,000 are attached to the instructions 210-54 of the Komitet standartov, mer i izmeritel'nykh priborov (Committee of Standards,

Card 1/2

A Portable Device for Checking Tube Voltmeters SOV/115-89-9-23/35  
Measures and Measuring Instruments), 1958 edition.  
There is 1 diagram.

Card 2/2



SELEZNEV, I.I., dotsent; TARANENKO, A.D., inzh.

Methodology for controlling the quality of the operation of  
radio broadcasting transmitters. Vest. aviats 22 no.12:5-7  
D '62. (MIRA 16:1)

(Radio--Transmitters and transmission)

4443  
8/106/63/000/001/002/007  
A055/A126

6.4500  
6.4800  
AUTHORS:

Seleznev, I.I., Safin, M.S., Taranenko, A.D.

TITLE:

Method and apparatus for measuring the power of spurious radiation from short-wave transmitters

PERIODICAL:

Elektrosvyaz', no. 1, 1963, 13 - 16

TEXT:

The new method described in this article is based on the formulae:

$$p = \frac{U_{\max} U_{\min}}{W_f}, \quad (1)$$

or

$$p = I_{\max} I_{\min} W_f. \quad (2) \quad X$$

where p is the measured power passing through the feeder,  $W_f$  is the wave-impedance of the feeder, and  $U_{\max}$ ,  $U_{\min}$ ,  $I_{\max}$  and  $I_{\min}$  are, respectively, the voltages and currents in antinodal and nodal points of the line. The quantities  $\alpha_{\max}''$  and  $\alpha_{\min}''$  (deviations of the pointer) determined by the expressions

$$I_{\max} = C_2 \alpha_{\max}''; \quad I_{\min} = C_2 \alpha_{\min}'' \quad (4)$$

Card 1/3

8/106/63/000/001/002/007  
A055/A126

Method and apparatus for measuring the power of ....

where  $C_2$  is a proportionality coefficient, are measured in the method, and the spurious radiation power is calculated with the aid of formula:

$$P = B_2 W_f \alpha_{\max}^2 \alpha_{\min}^2, \quad (6)$$

$B_2$  ( $B_2 = C_2^2$ ) and  $W_f$  being known. The measuring apparatus (Fig. 1) contains a single wire-loop 1 (75 mm in diameter) placed in an electrostatic shield. The distance between loop and feeder is 250 mm. The selective properties of the loop are used for separate measurement of antiphase and cophase wave power. The emf induced in the loop is applied, through the symmetrical h-f cable 2 and the active matching four-pole 3, to the h-f filter 4, which is a type "mk" iterative filter serving to suppress the fundamental frequency voltage. (The circuit diagram and the frequency response of the filter are reproduced in the article.) The voltage is next applied, through the balancing h-f transformer 5, to the frequency-selective microvoltmeter 6, which contains a sensitive receiver with calibrated amplification. The devices 3, 4, 5 and 6 are placed inside a grounded iron housing. The values of  $\alpha_{\max}^2$  and  $\alpha_{\min}^2$  are read on the scale of the microvoltmeter tuned to a determined harmonic-component frequency. In an experimental apparatus, the range of the harmonic-component frequencies was 30 to 140 Mc/s (adequate alterations permit reducing it to 3 Mc/s); the limits of the measured power

Card 2/3

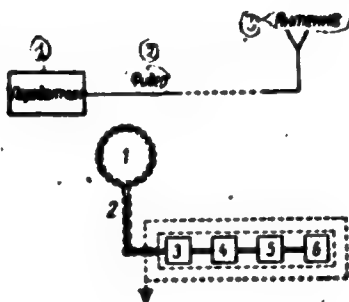
Method and apparatus for measuring the power of ....

S/106/63/000/001/002/007  
A055/A126

er were  $1 \mu\text{w}$  and  $50 \text{ w}$ ; the measurement precision was not less than  $\pm 25\%$ . The determination of the proportionality coefficient  $B_2$  is briefly described on a practical example at the end of the article. There are 4 figures.

SUBMITTED: February 5, 1962

Figure 1: ① - transmitter  
② - feeder  
③ - antenna



Card 3/3

TARANENKO, A. F. Cand. Med. Sci.

Dissertation: "Comparative Pathologico-Histological Data on Guinea Pig Typhus  
Caused by Intercerebral Injection of the Virus, Rickettsia Prowazekii." Central  
Inst. for Advanced Training of Physicians. 10 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17336)

~~SECRET~~  
MASHKOV, A.V.; TARANENKO, A.F.

Studies on pathogenesis of tularemia in experimental animals.  
Report No.3: Dynamics of multiplication of the causative agent and  
development of morphological changes in organs of white mice follow-  
ing subcutaneous administration of Pasteurella tularensis. Zhur.  
mikrobiol.epid. i immun. 28 no.8:122-125 Ag '57. (MIRA 11:2)

1. Iz Moskovskogo instituta vaktsin suboretok ineni Mechnikova.  
(TULAREMIA, experimental,  
multiplication of pathogens & morphol. changes after  
subcutaneous admin. of cultures (Rus))

TARANENKO, A.F.

Case of agranulocytosis following butadione therapy of rheumatic heart disease. Probl. gemat. i verel. krovi 4 no.5:48-50 My '59.  
(MIRA 12:7)

1. Iz kafedry gosital'noy terapii (zav. - prof. V.S. Nesterov)  
Voronezhskogo meditsinskogo instituta.

(RHEUMATIC HEART DISEASE, ther.

phenylbutazone causing agranulocytosis (Rus))

(AGRANULOCYTOSIS, etiol. & pathogen.

phenylbutazone ther. of rheum. heart dis. (Rus))

(PHENYLBUTAZONE, inj. eff.

agranulocytosis in ther. of rheum. heart dis. (Rus))

VORONKOVA, O.I.; NAUMOVA, A.A.; TARANENKO, A.F.; YUDIN, Yu.G.

Morphological changes in the chorion-allantoid membrane  
of chick embryos in blood cultures from leukemia patients.  
Vop. klin. pat. no.2:263-271 '61 (MIRA 16:12)

1. Iz nauchno-eksperimental'nogo otdela (zav. - doktor med.  
nauk O.I.Voronkova) i patologoanatomicheskogo otdela (zav.  
prof. S.B. Vaynberg [deceased]) Moskovskogo oblastnogo nauchno  
issledovatel'skogo klinicheskogo instituta imeni Vladimirskogo.



TARANENKO, A.F.

Agranulocytosis developing after implantation of autoclaved spleen and immune agranulocytosis with favorable effect from cortisone therapy. Probl.gemat.i perel.krovi no.7:47-48 '62.  
(MIRA 15:9)

1. Iz kafedry gosspital'noy terapii (sav. - prof. V.S. Kosterov)  
Voronezhskogo meditsinskogo instituta.  
(AGRANULOCYTOSIS) (CORTISONE) (SPLEEN)

BURMISTROV, S.I.; TARANENKO, A.G.

Quinonemonoxime bisulfates. Ukr. khim. shur. 22 no.5:620-622 '56.  
(MIRA 10:6)

1. Dnepropetrovskiy khimiko-tehnologicheskii institut.  
(Quinone)

TARANENKO, A. G. Cand Biol Sci -- (diss) "Secretory<sup>and</sup> motor function of ~~the~~  
empty stomachs of horses in case<sup>of</sup> of ~~various~~<sup>the</sup> compositions of fodder rations."  
Len, 1957. 19 pp (Min of Agr USSR. Len Vet Inst), 130 copies (KL, 3-58, 96)

-21-

USSR / Human and Animal Physiology. Digestion, Stomach.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70260

Author : Taranenko, A. G.

Inst : Leningrad Veterinary Institute

Title : The Secretory-Motor Functions of the Empty Stomach  
of the Horse Following Feeding with Rations of Different  
Compositions

Orig Pub : Avtorof. dis. kand. biol. n., Leningr. Vet. In-t,  
Leningrad, 1957

Abstract : No abstract given

Card 1/1

KONDRATENKO, A.B.; TARANENKO, A.G.; MILYAYEVA, P.K.; SEREDKINA, Ya.P.

Change in the ethyl fraction supply network to the ethyl benzene  
department. Prom. energ. 16 no.2:16 P '61. (MIRA 14:3)  
(Benzene)

TARANENKO, A.G.

Effect of mammary denervation on the amino composition of goat milk casein. Fiziol. zhur. 47 no.4:454-458 Ap '61. (MIRA 14:6)

1. From the Laboratory of Farm Animal Physiology and the Scientific Experimental Station, Institute of Physiology, U.S.S.R.  
(UDDER--INNERVATION) . (AMINO ACIDS)  
(CASEIN)

TARANENKO, A.G.

Effect of prolactin on the basic components of goat's milk.  
Fiziol. zhur. 47 no.12:1490-1495 D '61. (MIRA 15:1)

1. From the Laboratory of Physiology of Farm Animals and Experimental  
Station, I.P.Pavlov Institute of Physiology, Leningrad.  
(PITUITARY HORMONES) (GOAT'S MILK)

TARANENKO, A.G.

Influence of the thyroid gland on the amount of casein in milk and on its amino acid composition. Fiziol.zhur. 48 no.6:742-747 Je '62.  
(MIRA 15:8)

1. Laboratoriya fiziologii sel'skokhozyaystvennykh zhivotnykh i Nauchno-opytnaya stantsiya Instituta fiziologii imeni I.P.Pavlova AN SSSR, Leningrad.

(THYROID GLAND) (MILK--COMPOSITION) (CASEIN)



TARANENKO, A.G.

Effect of chronic stimulation of the afferent nerves of the mammary gland on the synthesis of milk proteins in goats.

Fiziol.zhuc. 51 no.3:350-256. Yr '65.

(NMR 12:5)

1. Laboratoriya fiziologii i biokhimiil laktatsii Instituta fiziologii imeni Pavlova AN SSSR, Leningrad.

DANILENKO, S.I., kand. med. nauk; TARANENKO, A.M.

Be careful in working with poisonous chemicals. Zashch.  
rast. ot vred. i bol. 9 no.5:32-33 '64. (MIRA 17:6)

1. Doverennyy vrach Tsentral'nogo komiteta professional'nogo  
soyuza rabochikh i sluzhashchikh sel'skogo khozyaystva i zago-  
tovok.

ACCESSION NR: AP4034714

8/0064/64/000/004/0272/0272

AUTHOR: Taranenko, A. S.; Belousova, G. A.

TITLE: Improvement in the technology of producing di- $\beta$ -naphthyl-p-phenylenediamine.

SOURCE: Khimicheskaya promyshlennost', no. 4, 1964, 272

TOPIC TAGS: dinaphthyl p phenylenediamine, production, process, purification

ABSTRACT: The proposed method for preparing di- $\beta$ -naphthyl-p-phenylenediamine of higher purity than previously attained comprises: pouring a fine spray of a molten reaction mass of  $\beta$ -naphthol and p-phenylenediamine into strongly agitated hot (150C) ethylene glycol to form a suspension of the product in ethylene glycol. The hot suspension is filtered, the precipitate washed with 150C ethylene glycol and with hot water, centrifuged and dried at 100-120C. A 95% yield of di- $\beta$ -naphthyl-p-phenylenediamine, melting 228-229C is obtained. Orig. art. has: 1 equation.

ASSOCIATION: None

Card 1/2

L 51427-65 EWT(m)/EPF(c)/EWP(j)/T/EWA(c) Pc-4/Pr-4 RPL JW/EM

ACCESSION NR: AP5015487

UR/0286/65/000/008/002../0021  
66.095.82

AUTHOR: Taranenko, A. S.; Glushkova, L. V.

TITLE: A method for producing N,N'-dinitroso-N,N'-diphenyl-n-phenylendiamine.  
Class 12, No. 170064 ✓

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 21

TOPIC TAGS: diamine, hydrochloric acid, acetone, sodium nitrite

ABSTRACT: This Author's Certificate introduces a method for producing N,N'-dinitroso-N,N'-diphenyl-n-phenylendiamine by treating N,N'-diphenyl-n-phenylendiamine with sodium nitrite in the presence of an acid. The quality of the product is improved by carrying out the process in the presence of hydrochloric acid and acetone.

ASSOCIATION: Nauchno-issledovatel'skiy institut khimikatov dlya polimernykh materialov (Scientific Research Institute of Chemicals for Polymer Materials)

SUBMITTED: 08Jun64

ENCL: 00

SUB CODE: 00, GC

Card 1/2

L 51427-65

ACCESSION NR: AP5015487

NO REF SOV: 000

OTHER: 000

*me*  
Card 2/2

KOKHANOVA, I.V.; REDNIKOVA, T.A.; STARKOV, S.P.; YEGIDIS, F M ;  
TARANENKO, A.S.; ZOLOTAREVA, K.A.

Ion-exchange resins as catalysts in organic synthesis. Part 2:  
Arylalkylation of n-cresol with styrene on KU-1 and KU-2 cation  
exchange resins. Zhur. org. khim. 1 no.4:648-649 Ap '65.  
(MIRA 18.11)

1. Nauchno-issledovatel'skiy institut khimikatov dlya polimernykh  
materialov i Tambovskiy gosudarstvennyy pedagogicheskiy institut.

LEBEDEV, Konstantin Borisovich; TARANENKO, B.I., otv. red.; PUSHKINA,  
L.I., red.; ZHUKOVA, N.D., red; ALFEROVA, P.F., tekhn. red.

[Production of calcium molybdate] Proizvodstvo molibdata kal'-  
tsiia. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1962. 119 p.  
(MIRA 15:5)

(Calcium molybdate)

BRISKMAN, A.M.; TARANENKO, D.S.

Problem of myoclonus epilepsy. Zhur.nerv.i psikh. 59 no.7:833-835  
'59. (MIRA 12:11)

1. Nervologicheskoye otdeleniya (zav. A.M. Briskman) Cherkasskoy  
oblastnoy bol'nitsy (glavnyy vrach G.I. Ivakhno).  
(EPILEPSY, case reports,  
myoclonus epilepsy (Rus))



TARANENKO, G. A.

25875. TARANENKO, G. A. Fitatel'nost' tsel'nogo moloka pri kormlenii telyat myasnykh porod. Trudy Vsesoyuz. nauch.-issled. in-ta zhivotnovodstva, t. XVII, 1949, S. 93-106.—Bibliogr: 10 Nazv.

So. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

USSR/Farm Animals. Swine

Q-3

Abstr Jour : Ref Zhur - Biol., No 8, 1958, No 35697

Author : ~~Taranenko G.A.~~

Inst : Not Given

Title : The Utilization of Travertine in the Fattening of Pigs  
(Ispol'zovaniye travertinov pri otkormo podsvinkov)

Orig Pub : Tr. Kubansk. s.-kh. in-ta, 1957, vyp. 3 (31), 169-174

Abstract : No abstract

Card : 1/1

TARANENKO, G.A.; KENLOV, Yu.S.; PIVLAKOVA, Y.-V.

Study of free radical processes in the tissues of irradiated  
animals. Nauch. dokl. vys. shkoly; biol. nauki no.1:82-86  
'66. (SIRA 12:1)

1. Rekomendovana kafedroy biofiziki Moskovskogo gosudarstvennogo  
universiteta. Submitted July 8, 1965.

KOZLOV, Yu.P.; TAMBIYEV, A.Kh.; TARANENKO, G.A.

Free-radical states of some antibiotics. Dokl. AN SSSR 154  
no. 3:718-720 Ja '64. (MIRA 17-5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
Predstavleno akademikom V.A.Karginym.

L 28841-66 ENT(m)

ACC NR: AP6018652

(A,N)

SOURCE CODE: UR/0325/66/000/001/c082/0036

AUTHOR: Taranenko, G. A.; Kozlov, Yu. P.; Burlakova, Ye. V.

ORG: Department of Biophysics, Moscow State University im. M. V. Lomonosov (Kafedra biofiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: Study of free radical processes in tissues of irradiated animals

SOURCE: Nauchnyye doklady vysshey shkoly. Biologicheskkiye nauki, no. 1, 1966, 82-86

TOPIC TAGS: free radical, copolymerization, mouse, radiation biologic effect, organic amide, radiation injury

ABSTRACT: The method of inoculated copolymerization of acryl amid labelled with  $Cl^{14}$  was used to study the kinetics of free radical processes in certain tissues of animals exposed to radiation in doses of 600 and 1,500 r. Three series of experiments were conducted with white mice. Acryl amide was administered: 1) 30 minutes before irradiation; 2) immediately after exposure; and 3) at various intervals after irradiation and four hours before decapitation. The degree of copolymerization of  $Am-Cl^{14}$  was determined by radiometric and autoradiographic methods. From the results of the experiment tissues of irradiated animals can be divided into three groups with respect to the character of free radical processes: tissues in which the concentration of free radicals did not differ from the norm (brain, blood erythrocytes, and

Card 1/2

L 28841-66

ACC NR: AP6018652

muscles), tissues in which it exceeded the norm (liver, kidneys, and blood plasma), and tissues in which it was lower than the norm (spleen). The character of free radical processes is disrupted in various forms of radiation injury. In the post-radiation period (600 r.) regulation of free radical reactions is observed in a number of tissues. This is apparently associated with the development of restorative processes. No such regulation occurs with lethal doses on the order of 1,500 r. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06, 07 / SUBM DATE: 08Jul65 / ORIG REF: 003

Card 2/2 CC

TARANENKO, G. H.

X-ray observations on atypically progressing metastases of the bones. Vrach. delo no.6:34-36 Je '62. (MIRA 15:7)

1. Diagnosticheskiy otdel (rukovoditel' - kand. med. nauk A. I. Pozmogov) Kiyevskogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo i onkologicheskogo instituta.

(BONES—TUMORS) (BONES—RADIOGRAPHY)

TARANENKO, G.V., inzh.

Relay for protection from single-phase short-circuits to ground in  
6 kv. networks in open pit mines. Prom.energ. 19 no.7:36-38 J1 '64.  
(MIRA 18:1)



ALIKAYEV, V.A.; TARANENKO, I.L., veterinarnyy vrach; NIKOLAYEV, P.Ya., veterinarnyy vrach; MIKHAYLETS, R.M., veterinarnyy vrach; ARTEMENKO, I.A., veterinarnyy fel'dsher; MOSKALENKO, A.N., veterinarnyy fel'dsher; AL'BERTYAN, M.P., veterinarnyy vrach; SKARBOVENKO, V.I., veterinarnyy vrach; MOROZOV, A.I., veterinarnyy fel'dsher; VESHCHAYLOV, V.T., veterinarnyy vrach; LUZHENKO, I.U., veterinarnyy fel'dsher; RUDOMETKIN, Ya.L., veterinarnyy vrach; PARSHUTKIN, I.M., veterinarnyy vrach; GOLOVANOVA, A.I., veterinarnyy vrach; SHIPILOVA, N.M., veterinarnyy vrach; SPIROV, V.D., veterinarnyy vrach; BONDARENKO, V.N., veterinarnyy vrach; KOVAL', P.K., veterinarnyy fel'dsher; ZHAMSUYEV, B.TS., veterinarnyy vrach; APALEV, Ye.M., veterinarnyy vrach; KOLOTIY, N.A., veterinarnyy vrach

Diseases of the young animal, their prevention and treatment; based on data received by the editors. Veterinariia 39 no.1:49-54 Ja '62. (MIRA 15:2)

1. Besodinskaya rayonnaya veterinarnaya lechebnitsa, Kurskoy oblasti (for Taranenko).
2. Bo'she-Sosnovskaya rayonnaya lechebnitsa, Permskoy oblasti (for Nikolayev).
3. Aleksandrovskiy veterinarnyy uchastok, Voznesenskogo rayona, Nikolayevskoy oblasti, Ukrainskoy SSR (for Mikhaylets, Artemenko, Moskalenko).
4. Kolkhoz "40 let Oktyabrya", Tarliyskogo rayona, Moldavskoy SSR (for Al'bertyan).

(Continued on next card)

Simultaneous determination of ammonia and hydrogen sulfide in dark and colored liquids. I. Lazavinsky, *Lab. and Chem. (U. S. S. R.)* 1934, No. 3, 65-67. The 100 cc sample was heated at 100-150° in a Kjeldahl flask, 250 cc for 30-60 min. The resulted gases were led, through a trap and Schiff water condenser, into 3 flasks: (1) with standardized  $H_2SO_4$ , (2) with I and (3) with  $Na_2SO_4$ .  $NH_3$  and  $H_2S$  were detd. by titration in the usual way.

A. Pestoff

CA

20

Determination of free sulfur in rubber by the iodometric method. I. Tarnowski. *J. Rubber Ind. (U. S. S. R.)* 12, 305-7(1935); cf. *C. A.* 30, 4034<sup>o</sup>.—The iodometric method cannot be used for rubbers contg. org. accelerators of the mercaptobenzothiazole or tetramethylthiuram disulfide type. These accelerators are ox. in  $\text{Na}_2\text{S}_2\text{O}_4$ , and thus give high results when titrated with I.  
A. N. Pestoff

ASD 51.8 DETAILORICAL LITERATURE CLASSIFICATION

The causes of destruction of the refractory material during the process of the manufacturing of carbon black. I. Taranenko and L. Kuvshina. *J. Rubber Ind.* (U. S. S. R.) 12, 820-1 (1935).—The oil spilled on the refractory (I) leaves ash after burning. The ash consists of low-melting fluxes (oxides of Fe, Ca, Mg, K and Na) which penetrate into the pores of I and form an enamel which has a diff. coeff. of expansion than I. Chem. action of gases, especially CO, attacks I. Fe oxide catalyzes the reaction as,  $2CO \rightleftharpoons CO_2 + C$ , at 600-800° and forms a swelling around the Fe spots in I. High porosity in I gives more surface for settling of C, thus increasing the deterioration of I. I should contain not higher than 1.20% Fe oxides and porosity not higher than 17-19% by vol. A. P.